

WHAT IS CLAIMED IS:

1. An antimicrobial formulation comprising a fatty acid monoester, an enhancer, two or more anionic surfactants, and a vehicle. ✓
2. The formulation of claim 1, wherein said fatty acid monoester is glycerol monolaurate, glycerol monocaprylate, glycerol monocaprate, propylene glycol monolaurate, propylene glycol monocaprylate, propylene glycol monocaprate, or combinations thereof.
3. The formulation of claim 1, wherein said enhancer is a chelating agent, an acid, or an alcohol.
4. The formulation of claim 3, wherein said chelating agent is EDTA or salts thereof.
5. The formulation of claim 3, wherein said enhancer is an organic acid.
6. The formulation of claim 5, wherein said organic acid is lactic, mandelic, succinic, tartaric, ascorbic, salicylic, benzoic, acetic, malic, or adipic acid.
7. The formulation of claim 3, wherein said alcohol is ethanol or isopropanol.
8. The formulation of claim 1, wherein said two or more anionic surfactants are selected from the group consisting of acyl lactylate salts, dioctyl sulfosuccinate salts, lauryl sulfate salts, dodecylbenzene sulfonate salts, and salts of C8-C18 fatty acids.
9. The formulation of claim 1, said formulation comprising two anionic surfactants.
10. The formulation of claim 1, wherein said vehicle is water, propylene glycol, polyethylene glycol, glycerin, ethanol, isopropanol, or combinations thereof.
11. The formulation of claim 1, said formulation further comprising a flavorant.
12. A method for reducing microbial levels on plants or plant parts comprising contacting a plant or plant part with an effective amount of an antimicrobial formulation, said antimicrobial formulation comprising a fatty acid monoester, an enhancer, two or more anionic surfactants, and a vehicle. ✓
13. A ready-to-use antimicrobial formulation comprising a fatty acid monoester; an enhancer; a surfactant; and a vehicle, wherein the concentration of said fatty acid monoester comprises from about 0.2 wt% to about 2.0 wt% of said ready-to-use formulation and the concentration of said enhancer comprises from about 1.1 wt% to about 25 wt% of said ready-to-use formulation. ✓

14. The ready-to-use formulation of claim 13, wherein said enhancer comprises from about 1.1 to 15 wt% of said formulation.
15. The ready-to-use formulation of claim 13, wherein said enhancer comprises from about 1.1 to 2.1 wt%.
16. The ready-to-use formulation of claim 13, said formulation further comprising a flavorant.
17. A method for reducing microbial levels on plants or plant parts, said method comprising contacting a plant or plant part with an effective amount of a ready-to-use antimicrobial formulation, said ready-to-use antimicrobial formulation comprising a fatty acid monoester; an enhancer; a surfactant; and a vehicle, wherein the concentration of said fatty acid monoester comprises from about 0.2 wt% to about 2.0 wt% of said ready-to-use formulation and the concentration of said enhancer comprises from about 1.1 wt% to about 25.0 wt% of said ready-to-use formulation.
18. A kit, said kit comprising a first container having a fatty acid monoester composition, said fatty acid monoester composition comprising a fatty acid monoester, a surfactant, and a vehicle; and a second container having an enhancer.
19. The kit of claim 18, wherein said fatty acid monoester composition comprises two or more anionic surfactants.
20. The kit of claim 18, wherein said fatty acid monoester is glycerol monolaurate, glycerol monocaprylate, glycerol monocaprate, propylene glycol monolaurate, propylene glycol monocaprylate, propylene glycol monocaprate, or combinations thereof.
21. The kit of claim 18, wherein said kit further comprises a label or package insert indicating that contents of said first container and said second container are mixed to produce an antimicrobial formulation that is effective for reducing microbe levels on plants or plant parts.
22. The kit of claim 21, wherein said label or package insert further indicates that said antimicrobial formulation is diluted before applying to plants or plant parts.
23. The kit of claim 18, wherein said enhancer is lactic acid.
24. The kit of claim 18, wherein said vehicle is propylene glycol and said fatty acid monoester is propylene glycol monocaprylate.
25. An article of manufacture comprising packaging material and an antimicrobial formulation within said packaging material, said antimicrobial formulation comprising a fatty acid monoester; an enhancer; a surfactant; and a vehicle,

wherein the concentration of said fatty acid monoester comprises from about 0.2 wt% to about 2.0 wt% of said formulation and the concentration of said enhancer comprises from about 1.1 wt% to about 25 wt% of said formulation, wherein said packaging material contains a label indicating that the formulation is ready to be applied to plants and plant parts to reduce levels of microbes.

26. A plant or plant part comprising an antimicrobial formulation, wherein said antimicrobial formulation comprises a fatty acid monoester, an enhancer, a surfactant, and a vehicle. ✓
27. The plant or plant part of claim 26, wherein said antimicrobial formulation further comprises a flavorant.
28. The plant or plant part of claim 26, said plant or plant part further comprising a food grade coating.
29. The plant or plant part of claim 28, wherein said antimicrobial formulation is interposed between said plant or plant part and said food grade coating.
30. The plant or plant part of claim 28, wherein said antimicrobial formulation and said food grade coating are intermixed.

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